

DOVER AREA SCHOOL DISTRICT

PLANNED INSTRUCTION/CURRICULUM GUIDE

PART A

COURSE DESCRIPTION: Technology Education

GRADE(S): 8 **COURSE LENGTH:** 90 Days

DURATION: 40 Min Class Period

FREQUENCY: 6/6Day Cycle

WRITTEN BY: Scott Goode & Peter Bowen

TIME (WEEKS/CLASSES)	UNIT CONTENT/CONCEPTS/ PROCESS	STATE STANDARD/ ANCHOR/NATIONAL	INSTRUCTIONAL STRATEGIES, LEARNING PRACTICES ACTIVITIES AND EXPERIENCES	MATERIALS AND RESOURCES
1 Day	Class Introduction	1.6.8	Lecture	Folder, Pencil, Paper, H.O.
4 Days	Design Process / Measuring/ ID Badge	1.1.8 1.3.8 1.6.8 3.2.7.D 3.7.7.A 3.7.7.C 9 3.7.7.D	Lecture, Note Taking, Guided Practice, Designing and Creating an ID Badge	Power Point, HO, Computer, Pencils , Markers, Badge Press, Badge Materials, Paper, Printer
2 Days	Technical Sketching / Tracing	1.6.8 3.1.7.D 3.7.7.A 3.7.7.B	Tracing, Lecture, Guided Practice	Tracing Paper, Magazines, Assignment Paper
5 Days	Measuring Oblique sketches, Isometric paper/ 3D sketching	1.1.8 1.6.8 2.2.8 2.9.8 3.1.7.D 3.7.7.B	Guided Practice through drawing blocks,	Isometric graph paper, Graph Paper, pencil, folder
10 Days	AutoCad / CO2Car	1.1.8 2.2.8 2.9.8 2.3.8 3.1.7.D 3.2.7.D 3.7.7.B 3.7.7.C 3.7.7.D	Guided Practice, Lecture, Designing Co2Car, Co2 Car FWD	Computer, Auto Cad, Co2 Car Design Packet, Paper, Printer
12 Days (whole project)	Metric Scale / CO2 Car	1.1.8	Learning and applying the metric scale	Computer, Cad, Metric

TIME (WEEK/CLASSES)	UNIT CONTENT/CONCEPTS/ PROCESS	STATE STANDARD (NAT. STANDARD)	INSTRUCTIONAL STRATEGIES, LEARNING PRACTICES ACTIVITIES AND EXPERIENCES	MATERIALS AND RESOURCES
		1.3.8 1.6.8 2.3.8 3.1.7.D 3.7.7.B		Scales, Co2 Design Packet
1 Day	Intro to Machines & Safety / CO2 Car	1.1.8 1.6.8 3.7.7.A 3.7.7.B	Lecture, Demonstration, Guided Student Practice, Hand Outs	Machines in lab, Consumable Materials, HO, Safety glasses
2 Days	Aerodynamics, lift, drag / CO2 Car	1.1.8 1.3.8 1.6.8 2.2.8 2.3.8 3.4.7.C 3.7.7.B	Lecture, Guided Practice, Demonstration	Testing Packet, Scale, Wind Tunnel, Smoke Tunnel, Calculator, Fog Solution, Foam Car, Overhead Projector, Safety glasses
1 Day	Weight & proportions (math) / CO2 Car	1.1.8 1.6.8 2.2.8 2.3.8 2.8.8 3.4.7.C 3.7.7.B	Lecture, Demonstration	Calculator, Foam Car, Metric scale, Testing Packet, Safety glasses
	Wood working / CO2 Car	1.1.8 1.6.8 2.2.8 2.3.8 3.4.7.A) 3.7.7.A	Demonstration, Guided Practice	Lab Machines, Consumables (wood), Tools, Wood Car, Safety glasses
2 Days	Sanding / CO2 Car	1.1.8 1.6.8 2.2.8 3.4.7.A 3.7.7.A 3.7.7.B	Demonstration, Guided Practice, Lecture	Sand Paper, Sanding Blocks, power Sanders, Files, Wood Car, Safety glasses
2 Days	Finishing / CO2 Car	1.1.8 1.6.8 3.4.7.A 3.7.7.A	Demonstration, Guided Practice	Spray Gun, Sanding Sealer, Spray Booth, Wood Car, Paint Stand, Safety glasses

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		3.7.7.B		
2 Days	Airbrush / CO2 Car	1.1.8 1.6.8 3.7.7.A 3.7.7.B	Demonstration, Guided Practice	Airbrush, Compressed Air, Sink, Paint, Co2 Car, Paint Stand, Safety Glasses
12 Days (whole project)	GIS, Google earth, measuring, World Geography, Architecture, scaling Pace maps	1.1.8 1.6.8 2.2.8 2.3.8 3.1.7.D 3.7.7.A 3.7.7.B 3.7.7.C 3.7.7.D	Lecture, Demonstration, Guided Practice, Hand Outs, GeoCaching	Computer, Graph Paper, Colored pencils, Markers, Tape Measure, Stakes, Large Field, Pace Count
5 Days	World Geography, Google Earth / GIS	1.1.8 1.6.8 2.3.8 3.1.7.D 3.7.7.C 3.7.7.D	Lecture, Demonstration, Self Exploration	Computer, Hand Out
7 Days	Scaling, mapping, layout / Pace Map	1.1.8 1.6.8 2.2.8 2.3.8 3.1.7.D 3.7.7.A 3.7.7.B	Demonstration, Lecture	Graph Paper, Colored pencils, Markers, Tape Measure, Stakes, Large Field, Pace Count
12 Days (whole project)	Manufacturing , Safety / Wood Project	1.1.8 1.6.8 2.3.8 3.4.7.A 3.7.7.A 3.7.7.B	Lecture, Demonstration, Guided Practice, Safety check	Machines and Tools, wood, Safety glasses
8 Days	Measuring, Following Plans / Wood Project	1.1.8 1.6.8 2.2.8 2.3.8 3.7.7.A 3.7.7.B	Lecture, Practice, Reading and understanding plans	Plans, Safety Glasses, Wood, Machines and Tools

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8 Days	Machine use / Wood Project	1.1.8 1.6.8 2.3.8 3.4.7.A 3.7.7.A 3.7.7.B	Demonstration, Guided Practice	Lab Machines, Consumables, Tools, Safety Glasses
2 Days	Assembly / Wood Project	1.1.8 1.6.8 2.3.8	Demonstration	Clamps, Screws, Nails, Glue, Nail gun, Drills
2 Days	Finishing / Wood Project	1.1.8 1.6.8 3.4.7.A 3.7.7.A 3.7.7.B 3.7.7.C 3.7.7.D	Demonstration	Sand paper, Wood Finish, Steel Wool, Tack Cloth, Paint Brush
12 Days (whole project)	Digital Photography / Desktop Publishing	1.1.8 1.6.8 3.7.7.C 3.7.7.D	Lecture, Demonstration, Guided practice, Self exploration	Cameras, Computers, Lights, Paper, Printer, Handout
2 Days	Photo Composition / Taking Pictures / Digital Photography	1.1.8 1.6.8 3.7.7.C 3.7.7.D	Demonstration, Lecture, Guided practice	Camera, Handout
5 Days	Photo Editing / PhotoShop / Digital Photography	1.1.8 1.6.8 3.1.7.D 3.7.7.B 3.7.7.C 3.7.7.D	Lecture, Demonstration, Guided practice, Self exploration	Computer, Camera, Handout
5 Days	Desktop Publishing	1.1.8 1.6.8 3.7.7.B 3.7.7.C 3.7.7.D	Lecture, Demonstration, Guided practice, Self exploration	Computer, Handout
10 Days (whole project)	Design Process / T Shirts	1.1.8 1.3.8 1.6.8 3.7.7.B	Lecture, Demonstration, Guided practice, Self exploration	T Shirt, Computer, Handout, Screen, Ink, Screen printing tools and accessories, Heat press, Transfer paper, printer

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		3.7.7.C 3.7.7.D		
5 Days	Screen Printing / T Shirt	1.1.8 1.6.8 3.7.7.B 3.7.7.C 3.7.7.D	Demonstration	T Shirt, Screen, Ink, Screen printing tools and accessories
5Days	Sketching, Layout / T Shirt	1.1.8 1.6.8 3.7.7.B 3.7.7.C 3.7.7.D	Lecture, Guided practice, Self exploration	Handout, Pencil, Computer
10 Days (whole project)	Rockets	1.1.8 1.6.8 2.2.8 2.3.8 3.4.7.C 3.7.7.A	Lecture, Demonstration	Rocket parts, Handouts, Glue, Launch pad, Engines, Igniters, Spray paint, Scissors
6 Days	Construction / Assembly / Rockets	1.1.8 1.6.8 2.3.8 3.7.7.A 3.7.7.B	Demonstration, Guided practice, Self exploration	Rocket parts, Glue, Spray paint, Scissors
2 Days	Theory / Notes / Rockets	1.1.8 1.6.8	Lecture, Note taking	Paper, Pencil, Handouts, Folder
2 Days	Launch / Action – Reaction / Rockets	1.1.8 1.6.8 3.4.7.C 3.7.7.A 3.7.7.B	Lecture, Guided practice, Self exploration	Rocket, Engine, Igniter, Launch pad